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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,944	07/11/2003	Chih-Wei Chen	LA-7196-120XX	6628
167	7590	03/16/2006	EXAMINER	
FULBRIGHT AND JAWORSKI LLP 555 S. FLOWER STREET, 41ST FLOOR LOS ANGELES, CA 90071			SETLAK, ANDREW T	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/618,944	<b>Applicant(s)</b> CHEN, CHIH-WEI	
	<b>Examiner</b> Andrew Setlak	<b>Art Unit</b> 2166	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 6 & 7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,459,624 (henceforth referred to as Kuo).

Claim 1 is anticipated by Kuo as follows: **A storage server embedded code backup method for use on a storage server having a nonvolatile programmable system memory module and a mass storage module, with the memory module being used to store a set of embedded code, for the purpose of providing a backup and recovery capability to the embedded code; the storage server embedded code backup method comprising: partitioning a backup region from the storage space of the storage server's mass storage module (C2:L17-19); creating a duplicated copy of the embedded code in the memory module as backup and storing the backup copy into the backup region in the storage server's mass storage module (C3:L21-26); and in the event of the embedded code being corrupted, moving the backup copy of embedded code stored in the backup region in the storage server's mass storage module back to the storage**

**server's system memory module to thereby restore the corrupted embedded code in the system memory module (figure 2, C2:L13-21).**

**Claim 3 is anticipated by Kuo as in Claim 1, wherein the embedded code stored in the storage server's system memory module includes a server-specific operating system and at least one server-specific application (C2:L5-9).**

**Claim 4 is anticipated by Kuo as follows: A storage server embedded code backup system for use with a storage server having a nonvolatile programmable system memory module and a mass storage module, with the memory module being used to store a set of embedded code, for the purpose of providing a backup and recovery capability to the embedded code; the storage server embedded code backup system comprising: a backup region partitioning module, which allows a user-operated session to partition a backup region from the storage space of the storage server's mass storage module (C2:L17-19); a backup checking module, which is capable of checking whether the backup region in the storage space of the storage server's mass storage module stores a backup copy of the embedded code in the storage server's system memory module (C3:L58-62); a backup creating module, which is capable of creating a duplicated backup copy of the embedded code in the storage server's system memory module and storing the backup copy into the backup region in the storage server's mass storage module (C3:L62-64); a code inspecting module, which is capable of being activated at the boot and during operation of the storage server to inspect whether the embedded code in the system memory**

**module is corrupted, and if yes, generating a recovery enable message (C3:L15-17); and a recovery module, which is capable of being activated in response to the recovery enable message from the code inspecting module to move the backup copy stored in the backup region in the storage server's mass storage module back to the system memory module to thereby restore the corrupted embedded code in the system memory module (C3:L21-24).**

Claim 6 is anticipated by Kuo as in claim 4, **wherein the embedded code stored in the storage server's system memory module includes a server-specific operating system and at least one server-specific application (C2:L5-9).**

Claim 7 is anticipated by Kuo using the same rationale as applied to the combination of claims 4 and 6 above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 5 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo as applied to claims 1, 3, 4, 6 & 7 above, and further in view of U.S. Patent No. 6,754,767 (henceforth referred to as Gold).

Claims 2, 5 & 8 are taught by Kuo as in claims, 1, 3, 4, 6 & 7. However, Kuo does not explicitly indicate the usage of a RAID array as the mass storage sub-system

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in the disclosed system. Yet Gold teaches using a RAID array for the storage of back up OS and system application data in a headless device which supports automatic fault recovery of said OS and system application data (Gold: figure 4, C2:L5-28).

One of ordinary skill in the art at the time of invention would have recognized the well-known advantages of using a RAID array as the mass storage sub-system, since RAID is a common method of inexpensively creating redundant storage for important data. Also, according to Gold, "a further advantage may include increased reliability by avoiding the possibility of user error in... the RAID disk configuration". Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to use a RAID array as the mass storage device in the system of Kuo since it is more reliable and less error prone than the alternatives.

### ***Conclusion***

The prior art made record of on form PTO-892 and not relied upon is considered pertinent to the applicants' disclosure.

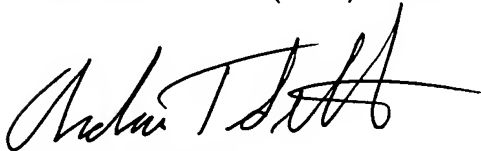
### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Setlak whose telephone number is (571) 272-4060. The examiner can normally be reached on M-F 10:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Setlak  
Patent Examiner  
3/7/2006



Leslie Wong  
Primary Patent Examiner